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Revisiting Toulouse-Le Mirail: from utopia of the present to the future in the past

Abstract

The article discusses the conception and the recent partial demolition of the Toulouse-Le Mirail project, designed by the French office Candilis-Josic-Woods, relating it to the postwar period and to themes that emerged during discussions and meetings of Team 10. The meeting of Royaumont in 1962 is studied. In such occasion the project was presented by Georges Candilis and it was criticized for its large scale, revealing the position of authors such as Jaap Bakema, José Antonio Coderch, Fernando Távora and André Schimmerling, all present at the meeting. The method combines bibliographic research, investigation into Team 10 archives belonging to the collection of the *Het Nieuwe Instituut* in Rotterdam, as well as an empirical component with a site visit to the work. As a result, it is questioned to what extent the architectonic and urban values related to the project can be reinterpreted to support new reflections consistent with the reality of the interventions in large-scale housing settlements.

Keywords

Urban structures. Urban design. Modern architecture.

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REVISITANDO TOULOUSE-LE MIRAIL: DA UTOPIA DO PRESENTE AO FUTURO DO PRETÉRITO

Resumo

O artigo aborda a concepção e a recente demolição parcial do projeto Toulouse-Le Mirail, de autoria do escritório francês Candilis-Josic-Woods, relacionando-o com o período do após-Guerra e com temas que emergiram durante discussões e encontros do Team 10. Investiga-se o encontro de Royaumont em 1962, oportunidade em que o projeto foi apresentado por Georges Candilis e recebeu críticas devido à sua grande escala, revelando o posicionamento de autores como Jaap Bakema, José Antonio Coderch, Fernando Távora e André Schimmerling, todos presentes ao encontro. O método conjuga pesquisa bibliográfica, investigação em arquivos do Team 10 pertencentes ao acervo do *Het Nieuwe Instituut* em Rotterdam, além de um componente empírico, com visita de campo à obra. Como resultado, questiona-se em que medida os valores arquitetônicos e urbanísticos relacionados ao projeto, podem ser reinterpretados para embasar novas reflexões condizentes com a realidade das intervenções em assentamentos habitacionais de grande escala.

Palavras-chave

Estruturas urbanas. Desenho urbano. Arquitetura moderna.

Introduction

This article aims to research the Toulouse-Le Mirail project, designed by the French office Candilis-Josic-Woods, relating it to the postwar period and to subjects that emerged in the Team 10 sphere of action. The architects who formed Team 10 were initially involved with the International Congresses of Modern Architecture (CIAM), constituting a new generation of architects who questioned the direction of this organization. This created a fissure that proved to be irreversible and ended CIAM activities in the late 1950s.

After the end of CIAM, Team 10 organized a series of meetings with the exploration of the architecture and urban planning projects of its members, such as Bagnols-sur-Cèze in 1960, Berlin in 1965, Urbino in 1966, Toulouse in 1971, Rotterdam in 1974, among many others. The meetings also facilitated the absorption of new ideas, providing mutual influence among those present. As Peter Smithson mentioned about the meetings,

> *In Team 10 the pleasure was being there as each one presented the idea of their project; defending it under attack, explaining it in the process of presentation; the project diminishing, enlarging, changing, in one's one mind as it opened itself to scrutiny 'on the wall'… it were these moments of coming together that made Team 10 meetings wonderful… the sense of newly worked materials* (SMITHSON, 1991, p.146).

The Team 10 meeting held in Royaumont in 1962 was organized by Georges Candilis and approached projects related to urban structures and groups of buildings. At that time, the Toulouse-Le Mirail project was presented by Candilis, generating criticism and reflections that were registered by architects who were in this meeting.

Prior to the formation of the Candilis-Josic-Woods office, Georges Candilis and Shadrach Woods worked at Le Corbusier's office in Paris. They participated in the design and monitoring of the construction of the *Unité d'habitation* in Marseille. After this work, both went to Africa to work as directors of ATBAT-Africa (JOEDICKE, 1969).

During the period in the African continent, Candilis and Woods developed one of their most relevant projects, a set of collective housing buildings in Casablanca. In this project, the authors identified characteristics of the local way of life and created a design that represented the junction between the knowledge of modern architecture and the local culture. The project reinterpreted the typology of the traditional villages found in the Atlas Mountains. The internal arrangement of the units made occasional changes possible over time, providing housing appropriation by its residents (AVERMAETE, 2006a). According to Francis Strauven, in these experiments in Morocco, to solve the problem of large-scale social housing projects combined with the specific context of the place, Candilis did

> *not fall back on the CIAM Existenzminimum, but again relied on local building traditions. He designed multi-story buildings on the basis of dwelling types inspired by the traditional kasbah house: elementary types, organized around a patio and generated from a terse geometry* (STRAUVEN, 1998, p.253).

The new approaches contained in the project in Casablanca were fundamental to the initial development of Team 10 thinking. The project was presented at CIAM IX in Aix-en-Provence in 1953, gaining notoriety by characters such as Alison and Peter Smithson, Aldo van Eyck and Jaap Bakema, all present at that congress.

From this context, the article will address the period of major urban projects in the European postwar and the Team 10 meeting in Royaumont. It is intended to re-evaluate criticisms that were submitted to the Toulouse-Le Mirail project, reflecting on the current situation of the development, which suffers from severe social problems and demolitions.

The postwar period and the major welfare state projects

The period that began with the end of World War II has undergone major modifications in the Western way of life, reflecting social, cultural, political, economic and technological changes. As a result of these transformations, the impact on the built environment and the changes in the physical structure of the cities demanded new challenges for architects and urban planners. This occurred especially in projects related to European historical cities, due to their characteristics and spatial restrictions (AVERMAETE, 2005).

In the postwar, topics such as the emergence of the consumer society, the diffusion of new mass media and the increase of the mechanized individual modes of transportation, needed to be made compatible with the cities' planning. In addition to these problems, also, there is demographic growth coming from the displacement of rural populations to the urban areas and other various migrations, generating great impact in the housing field. The decolonization of African countries also had significant consequences, especially in France. Thus, the deployment of the welfare state logic underlies the emergence of a new urban condition that developed in the second half of the twentieth century (AVERMAETE, 2005).

In spite of its economic, social and political understanding, the European welfare state also represents a phenomenon linked to the built environment, involving a strategy that selects a wide repertoire of interventions. New towns, social housing, schools, universities, hospitals, sports and leisure centers, highways, transportation systems are some of the key areas of operation, linked to a principle of economic redistribution and social welfare. Programs for the reconstruction of national industries, energy production systems and a diversified range of new infrastructure construction should also be considered (SWENARTON et al., 2015).

Although the theories and projects of Team 10 had a great impact on the international debate of the modern movement, especially in the context of CIAM, they must also be placed within the intellectual culture of the postwar period, comprehending the process of decolonization and modernization. In this sense, Avermaete (2005) argues that, apart from a debate between the "modern masters" and a new generation, an argument that is noted in the scientific

literature and in researches, one must also consider that changes in the architectural culture of the period – in which Team 10 was involved – were related to real architectural experiences, since the demand for architecture and urban projects from this phenomenon was very high.

In England, for example, with the reconstruction period and the creation of the welfare state, the achievements of the London City Council (LCC) explored the typology of housing, industrialization and urban design, as well as the emergence of proposals to decentralize populations with the creation of new towns. However, in the early 1950s, when the results of the experiments with new cities and large housing complexes that had been built were investigated, questions arose about the method applied. This evidenced that principles employed in these great works neglected important urban values, with consequences to the social life of the residents.

Theo Crosby (1967) argues that the major projects of the period lacked the identification of a more appropriate community relationship between people and the environment in which they lived, an aspect that these large housing settlements could not meet. According to the author: "*By 1951 it had already become clear that the really important thing had slipped away. We were rehousing people, but the life they were expected to live was not only dreary but already socially obsolete*" (CROSBY, 1967, p.6).

Regarding the French initiatives in the period, they were also related to a sequence of legislative changes in that country, such as the *Code de l'Urbanisme et de l'Habitation*, from 1954; the law for the formation of regional plans, from 1957; and the publication of the *Zones à' Urbaniser en Priorité* (ZUP) lists in 1958 and 1962. Thus, large settlements were planned in France for up to 70,000 people, as in Aulnay-sous-Bois, or even for 100 thousand people, as in the ZUP of Toulouse-Le Mirail, designed by Candilis-Josic-Woods (BENEVOLO, 1998).

Leonardo Benevolo emphasizes the attention that must be paid to the large scale of French developments, both for concentrating financing for the subsidized construction and for using large-scale heavy prefabrication procedures. The author registers:

> *Together with the appreciation of these positive characteristics, however, serious reservations must be made about the lack of integration between grands ensembles and pre-existing cities – that is, about the lack of urban interweaving appropriated to the importance of new weights placed in the territory – and on the large-scale repetition of conventional building types, already overcome by English and Dutch experience* (BENEVOLO, 1998, p.778).

It is noted that Team 10's area of activity was related to the repertoire of welfare state interventions and the challenge of large-scale design. This fact motivated its members to constant investigations and debates, promoting meetings and seeking improvement to support decisions of projects in which they were involved.

Team 10 primer: the utopia of the present

The year of 1962 had great importance to the affirmation of Team 10 as a group, for the launch of the first edition of Team 10 Primer, a publication with the compilation of texts, projects and other works produced by members of the group. It had the function of configuring Team 10 as a result of a collective expression, an intellectual movement – but with a strong practical result – of architecture and urbanism. The edition grouped together editorials collectively signed on behalf of Team 10, as well as texts and works of the various members.

In January 1962, months before the meeting of Royaumont, Team 10 members gathered in Drottningholm, Sweden, under the organization of Ralph Erskine, with the objective of preparing Team 10 Primer edition, from the draft that was already outlined.[1] Based on Erskine's boat-studio, Jaap Bakema, Alison Smithson, John Voelker and Shadrach Woods met and defined the final version of the book and also discussed the arrangements for the group meeting that would be held in September of the same year in Paris, at the Abbey of Royaumont.

[1] Alison Smithson's manuscript entitled "Team X Primer", January 8th, 1962. Bakema Archive, Het Nieuwe Instituut, BAKE.

Team 10 Primer was first published as a supplement of Architectural Design in 1962 and later edited in book format. The formatting of the book reveals innovation in the layout, suggesting an idea of hypertext formed by four columns. In the pages to the left, the main text is highlighted with larger font size; in the pages to the right, complementary texts, drawings and diagrams support the main subject, however, with some autonomy, forming fragments of texts of diverse authorship. Among the main texts, two smaller columns are inserted, alternating drawings, notes and textual references.

The autonomy of the columns allows the reader to move back and forth between pages, according to the variations between the main text and the supporting columns, creating dynamics and interaction. Thus, the idea of a collective work is evident in the content and in the very design of the book. In the presentation of the Primer, "The Aim of Team 10" is described:

> *Team 10 is a group of architects who have sought each other out because each has found the help of the others necessary to the development and understanding of their own individual work. But it is more than that.*
>
> *They came together in the first place, certainly because of mutual realization of the inadequacies of the processes of architectural thought which they had inherited from the modern movement as a whole, but more important, each sensed that the other had already found some way towards a new beginning.*
>
> *This new beginning, and the long build-up that followed, has been concerned with inducing, as it were, into the bloodstream of the architect an understanding and feeling for the patterns, the aspirations, the artefacts, the tools, the modes of transportation and communications of present-day society, so that he can as a natural thing build towards that society's realization-of-itself.*
>
> *In this sense Team 10 is Utopian, but Utopian about the present. Thus their aim is not to theorize but to build, for only through construction can a Utopia of the present be realized (SMITHSON, 1974, p.3).*

The inadequacy of the architectural thought inherited from the modern movement, mentioned above, is also reaffirmed by Georges Candilis in an article published in 1965, claiming that the work of reconstruction of European cities in the postwar period was greatly influenced by the content of Athens Charter. The architect argues that the Charter gradually began to become a sort of magic formula in which designers simply applied their rules without much reflection, replicating blocks of multi-store buildings in uniform patterns, as one would observe throughout France, Germany and Italy. As an alternative to this process, Candilis advocated a new dynamics of urban planning, with greater respect for the human scale, consideration for the interrelationships of urban functions and greater attention to mobility (CANDILIS, 1965).

It is possible to observe in different projects of Team 10 members that the spatial response proposed by the architects as an alternative involved the design of urban structures, the search for a greater mix of functions, the creation of systems and subsystems that enable growth and change, the recovery of urban values more compatible with the human scale, the creation of continuous pedestrian areas and a greater interaction between architecture and urbanism. The need for mediation between project scales is summarized in Shadrach Woods' annotation, relating architecture and urbanism:

> *The essence of urbanism, on the most mundane, practical level, is organization. This is also the essence of architecture. The relationship between architecture and urbanism is that they are parts of the same entity, which might be called environmental design, and that each is a part of the other* (WOODS, 1970, p.2-3).

The Team 10 meeting in Royaumont, 1962

The meeting at Royaumont took place between September 12th and 16th, 1962, and its organization was under the responsibility of Georges Candilis. The venue was located north of Paris in the facility of an old abbey, a place isolated from urban centers, consisting of a large building with courtyards and outdoor gardens.

The event also brought together, besides Team 10 main members, characters such as Fernando Távora, Guillermo Jullian de la Fuente, Christopher Alexander, José Antonio Coderch, Kishu Kurokawa, James Stirling,[2] André Schimmerling, among others, which gives greater importance to the meeting.

In the preparation material for the Royaumont meeting, participants were encouraged to reflect on the general topic –"reciprocal urban infrastructure / building group concepts" – from two modes of operation: 1) an extension of the idea of infrastructure in the group of buildings so that a system with growth potential can develop and the resulting form is not completely anticipated; the conception of "stem" in its ideal sense; 2) the idea of "group form", mentioning Fumihiko Maki's Shinjuku project as an example. It was proposed to the meeting the analysis and discussion of projects and ideas that were related to "buildings group concepts".[3]

[2] Although James Stirling's name was deleted from the book *Team 10 Meetings: 1953-1984* edited by Alison Smithson (1991), there is extensive documentary material with a register of his presence in Royaumont, including photographs and transcripts of his presentation, which dealt with the design of the Leicester University engineering building. Bakema Archive, Het Nieuwe Instituut, BAKE.

[3] Alison and Peter Smithson's manuscript entitled:"Draft. Invitation to:". Bakema Archive, Het Nieuwe Instituut, BAKE.

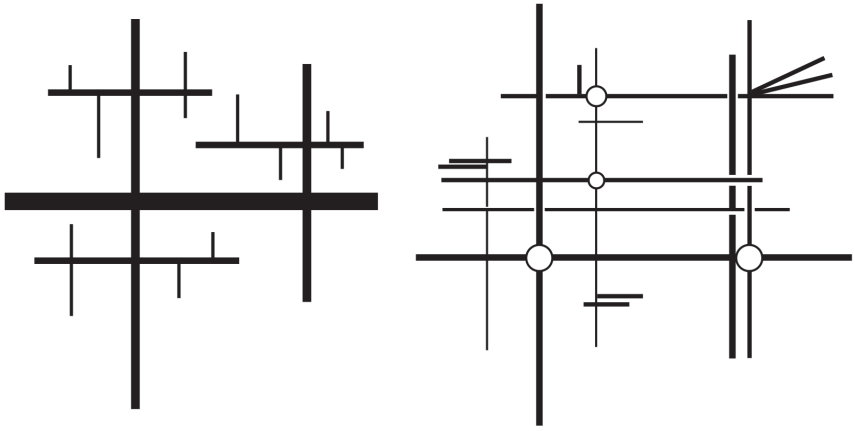

Figure 1 - Fumihiko Maki. Two types of *megaform*, as published in the book Investigations in collective form: A) hierarchical structure; B) open structure. Source: redesigned by the author based on Maki (1964).

The theme and material prepared to lead the reflections of the meeting reveals reverence to the work of the Japanese architect Fumihiko Maki, especially to his researches on the collective form (Figure 1). Maki had participated in the Team 10 meeting in Bagnols-sur-Cèze in 1960, and was involved with projects and material for the book that would be released a few years later, entitled "Investigations in collective form" (MAKI, 1964). Also the work of Kenzo Tange, his experiences on mega-structure and building complex, as in the 1961 Tokyo Bay project, was expressly mentioned in the meeting material, suggesting a conceptual approach between Team 10 and themes addressed by Japanese architects linked to the Metabolist Manifesto, which had been published in 1960 (MAKI, 2008).

At the Royaumont meeting, the Italian architect Giancarlo De Carlo presented an urban project to extend the city of Milan, which would be implemented at a site adjacent to the connecting highway between Milan and Genoa, with the intention of creating a regional system over an area still predominantly rural. Due to the large scale, its premise was based on a concept called "gravitational field", that is, the architect sought to solve the problem of planning and the direction of the general scheme and, thus, was not intended to design the architecture of the whole intervention, which would have the scale of an entire city. De Carlo understood that in this case it would be necessary to consider the participation of different forces involved, especially the participation of the future residents of the place, so it would not be appropriate for a single architect to answer for all the architectural questions (DE CARLO, 1991).

In agreement with the concept formulated for the project, the Italian architect defined two levels of control in the urban project in Milan. The first one was related to the general structure of the city. The second, with the architecture, that determined the beginning of the patterns of this structure. The design sought to establish decisive points to delimitate the beginning of the structure, entitled "hinges", and from one point to another, De Carlo proposed an elastic system that could take form in relation to certain conditions (DE CARLO, 1991).

At this point, De Carlo addressed a relevant topic within the discussions of Team 10, which was the possibility of developing a design method that would have only partial control over the final result. The method would guarantee the basic condition of the structure, and this, by defining the most important points

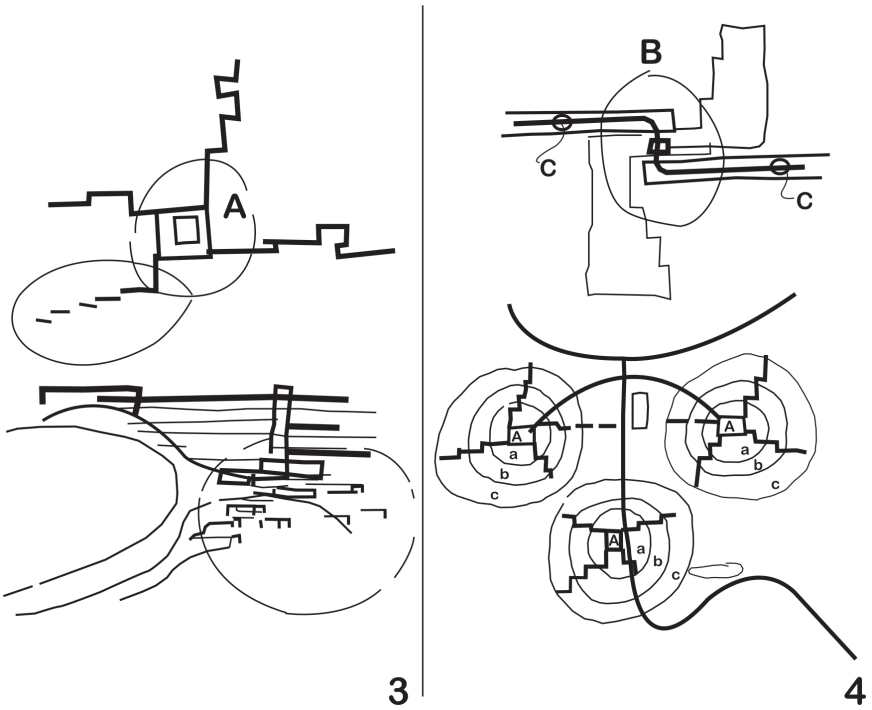

Figure 2 – Van den Broek & Bakema, Bochum University, 1962. Diagrams presented by Jaap Bakema in Royaumont. Source: redesigned by the author based on Bakema & Broek (1962).

– which De Carlo called hinges – would condition the development of the general entity. However, one would not have control of the final form, which could vary.

The project presented by Jaap Bakema in Royaumont was developed for the Bochum University competition and represented a large program involving a university facility and student accommodation. The complex was conceived as a single building spread over the relief, structured by a principle that allows growth from the interaction with the topography. In this way, three nodal points, or secondary centers, were chosen at the highest elevations of the terrain, where vehicle parking was also concentrated and the inner streets of the buildings could be accessed. From these points, the built bulk was developed completing the descending relief, having the main complex with auditoriums located in the valley (Figure 2).

The project also explored a concept called "visual group-idea", developed by Bakema in other works too, with the intention of creating transition elements between scales. In other words, between the small scale of the objects and the large scale of the built complex, in order to form what Bakema called "total space". In the Bochum University project, "visual group-idea" was used to guarantee growth and identity to the complex, based on the intensification of the topographic condition (BAKEMA, 1962).

Like the aforementioned Bakema and De Carlo projects, the Toulouse-Le Mirail project, presented by Georges Candilis in Royaumont, also related to the general topic of Team 10 meeting, addressing the design of urban structures and the arrangement of buildings groups on a large scale, as it will be explained below.

The toulouse–le mirail project

Le Mirail can be considered one of the emblematic projects of the Team 10 period of action, due to the conceptual principles that were used in its design and the large size of its implementation. The project has also been the subject of numerous criticisms by architects, planners, politicians and sociologists. The competition won by the Candilis-Josic-Woods office required the creation of a new neighborhood with approximately 100,000 residents, southwest of Toulouse's historic center, in an area occupied by an unused castle and agricultural activities. The process involves the welfare state in France and the great housing demands of the postwar.

Due to the quality of the city's technical and business universities, Toulouse has attracted a large number of chemical and electronic industries, in addition to concentrating the French airline industry. The sum of these factors led to a vigorous increase of the population growth in the city, causing the demand for new housing (AVERMAETE, 2006c).

Regarding architecture, it should be noted that the research on the collective housing project was developed by architects of the Candilis-Josic-Woods office in several previous projects, most notably in Casablanca, Morocco, Oran in Algeria and Caen in France. In the mass plan of Caen Hérouville, for example, projected structure was based not on the geometry of the blocks, but on activities between them, in order to organize the development of houses from this structure called "stem" (AVERMAETE, 2006b).

In the Toulouse-Le Mirail project, architects propose a system called "from stem to cluster", that is, a drawing that starts from a guiding and denser stem to form a gathering of related functional activities in the form of a cluster, aiming to establish different densities and scales in the *habitat*. This resulted in a better balance between the distribution of housing units and complementary facilities, from an implantation design that created platforms

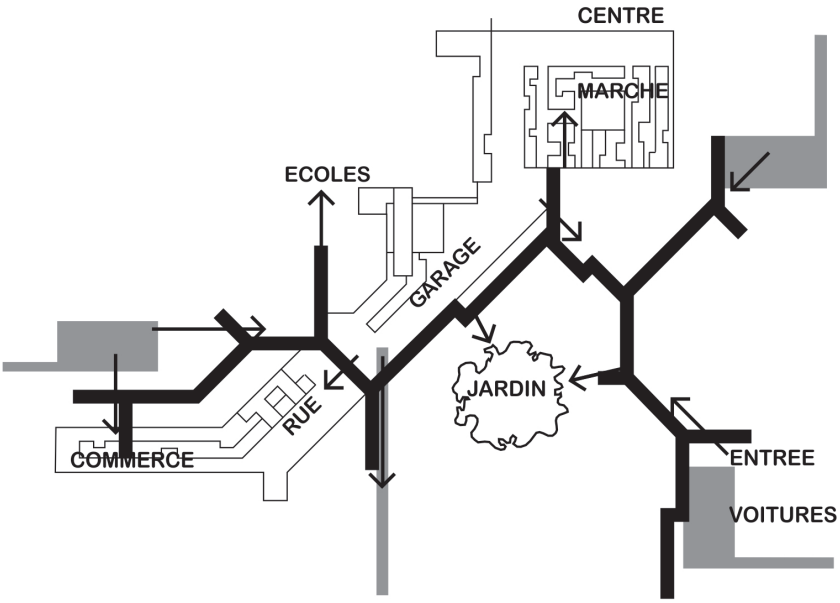

Figure 3 – Candilis-Josic-Woods. Toulouse-Le Mirail, 1962. Diagram with platform of pedestrian routes on the ground floor. Source: redesigned by the author based on Candilis et al. (1962).

with pedestrian paths on the ground floor, to walk through the public spaces and connect them to the facilities and services of collective use (JOEDICKE, 1969).

Routes are formed by a succession of continuous platforms, which allow pedestrians to cross the whole complex, cross on the streets or connect to complementary uses to the housing one. In Le Mirail, the intention was to provide a greater mix of functions and wide accessibility to pedestrians (Figure 3). Also it is emphasized in the housing blocks a horizontal balcony circulation system of large proportions, conceptually similar to the decks proposed by Alison and Peter Smithson in the Golden Lane project of 1952, functioning as aerial streets[4] (SMITHSON, 1967). A principle with height difference decreases the number of floors in the buildings as they move away from the main stem, reducing housing density.

The non-orthogonal geometry of the stem is distributed from a common system of organization, forming a structural system. Nevertheless, it allows the complex growth in different directions, according to the needs of enlargements, topographic accommodations and occupation characteristics of the existing site. A spot with green spaces spreads linearly along the main system stem, preserving the pre-existing castles and gardens, permeating the various uses of the complex.

The integrated way of thinking about housing and its extension formed by the collective use space was developed in different opportunities by the Candilis-Josic-Woods office. According to Jürgen Joedicke (1969), in designs of the French office the buildings form was solved by joining two main elements, considering the life that develops *within* the housing units and the community activities located *between* the buildings. Thus, the control over the final form would only be partial, because variations are allowed, depending on the interaction between the two elements.

The system "from stem to cluster" was also used by Candilis-Josic-Woods in the Fort Lamy project, similarly designed in 1962. In this project, the main stem was defined by its adjacent buildings that housed collective activities, representing a first structural axis. From this first structural axis connects a second axis in which buildings, conformed by a continuous system of aerial streets, extend the construction until the encounter with a network of small streets and alleys, linked to low buildings that, in turn, sew the urban fabric.

The resulting spatial arrangement at Fort Lamy presented a hierarchy of the public domain, both by the degree of buildings height and by the differentiation of the public space privacy level. The main objective of the project was to introduce structural elements that generate an urban principle (AVERMAETE, 2005).

It is noted that the elaboration period of the aforementioned projects is related to the most inventive moment of the Candilis-Josic-Woods office, since, in 1963, the redesign of Frankfurt center and the Free University of Berlin building were projected, both winners of international competitions and developed with the creation of a new system of spatial organization, called "web". It is an

[4] The aerial streets system was also used by Van den Broek & Bakema, for example, in the project in Tel Aviv, 1962 (JOEDICKE, 1976).

organizing principle supported by horizontal platforms with up to four floors, generating continuity and interconnection between public and private spaces, forming a grid with internal streets and courtyards.

For all this, it is inferred that the execution of Toulouse-Le Mirail, in the years of 1960, takes on a symbolism representative of important postulates elaborated in the sphere of action of Team 10.

Criticism and demolitions: the future in the past

During the presentation of Georges Candilis at the Team 10 meeting in Royaumont in 1962, the Catalan architect José Antonio Coderch made forceful criticisms to Toulouse-Le Mirail, arguing that the project of a mere housing demanded at least six months of dedication, so it would be impractical to think of a project like Le Mirail, which has such a gigantic scale and was designed in such a short time (SMITHSON, 1991).

The topic was also motive for consideration of the Dutch architect Jaap Bakema, registered in a manuscript with his memory after the meeting of Royaumont. Bakema mentions the architect's need of reconciling such different scales, to master and seek interrelationships in a project that admits variations between the small size of certain elements and the large size of the huge building programs.[5]

[5] Manuscript entitled: "Personal thinking presented at Abbey Team X meeting: Architecture as a tool in man's identification process". Bakema Archive, Het Nieuwe Instituut, BAKE.

Approaching the same subject, the Portuguese architect Fernando Távora wrote a text entitled "The meeting of Royaumont". In his reflections, Távora tried to differentiate what he experienced in the Team 10 meeting, comparing it with the congress that established the Athens Charter at CIAM IV in 1933. For him, in that CIAM, it was about "*men animated by certainties, by possibilities of hierarchizing and analyzing the problems that they had knowledge of, and hence the realization of a letter arriving at supposedly universal conclusions*" (TÁVORA, 1963, p.1). The author points out that defining a conclusion such as that made in Athens would no longer be possible because of the new reality that was presented. It was more diverse, more complex, a reality in which time and dimensions changed.

Távora also referred to the Toulouse-Le Mirail project. For him, more than agreeing on a solution to harmonize different scales in the project, what sensitized architects present at the Team 10 encounter was the necessity to face the question. As reported:

> *During the dense days and nights of Royaumont, many facts – great and insignificant – led me to this conclusion. The spirit of this meeting was perhaps summarized in Coderch's short commentary when Candilis exposed his plan for 25,000 houses in Toulouse, a plan carried out in five months and before which Coderch himself said he needed six months to study the project of a small housing. This outstanding contrast can clearly give us the dimension of the problems which are beginning to disturb us and which we absolutely*

> *need to solve, problems which, being a matter of visionaries only a few years before, are now a strong and living reality. I believe that the truth was on both sides, simply the consciousness of the phenomenon, no longer as utopia, but as palpable reality, now appears in its fullness.*
>
> *It is the need for a new synthesis between the number 1 and the number 25,000 that begins to present itself to our spirit as indispensable* (TÁVORA, 1963, p.1).

In an edition of *Le Carré Bleu* magazine devoted to the Team 10 meeting in Royaumont, André Schimmerling pointed the perception of a new reality that was appearing for architects, where the proportions would have become enormous, and the question of large scale would require a new design approach. For Schimmerling, the architect's conception of creating a "masterpiece" as a single object unrelated to the environment in which it was inserted would have no more space, thus emphasizing the need for architects to seek answers in the experiences of creating new "urban structures" (SCHIMMERLING, 1962).

Schimmerling addressed the question raised by Coderch in Royaumont under the view of what he called "shared responsibilities". For the author, it was a moral issue with which the architect would have to come across to revise his attribution, questioning the right of, as an architect, deciding how people we do not know – that is, the users of housing – should live. In this sense, it is argued that Coderch's interference, criticizing the Toulouse-Le Mirail project, had the merit of raising this essential problem for the Team 10 meeting and of indicating a possible way to plead the participation of future users in the design process SCHIMMERLING, 1962).

André Schimmerling further broadens the question of shared responsibility between architect and user, claiming the need for a connection between the architect's and the planner's performance, especially when dealing with large-scale composition, as in the examples presented at the meeting. For him, the project presented by Giancarlo De Carlo in Royaumont acted in this sense, when dimensioning mediation between a great structure and a free field for the intervention of other architects, sharing responsibilities, that is:

> *The sharing of responsibilities so justly formulated by Coderch should in my opinion, reckon above all the tasks that devolve the planner and architect on the base of a common operational method. This is not yet established. But the meeting had the advantage among others, of putting its participants on the traces of a new phenomenon* (SCHIMMERLING, 1962, p.6).

Returning to the current situation, after more than five decades of its construction, it is verified that Toulouse-Le Mirail currently hosts complex social conflicts, with serious problems of violence.[6] Despite the vanguard in its conception, current social problems question the range of the proposal managed in the scope of Team 10 discussions, causing some criticisms attributed to it to be validated.

[6] There are numerous reports in the press about the situation: "*Toulouse: le Mirail, de l'utopie à la désillusion*" (BORDENAVE, 2014); "*Multiples dégradations et violences à l'université Toulouse Jean-Jaurès*" (SAINT-SERNIN, 2016); "*Toulouse: des ouvriers visés par des tirs d'armes à feu au Mirail*" (VALERY, 2016).

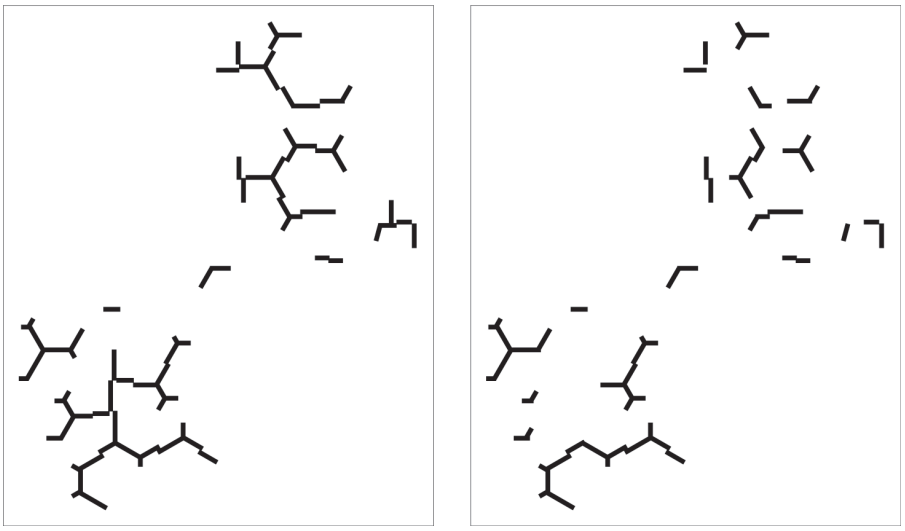

Figure 4 – Candilis-Josic-Woods, Toulouse-Le Mirail. Diagrams with the demolition of large residential buildings: A) site plan in 2002; B) site plan in 2015. Source: prepared by the author based on Google (2016).

Nowadays, it is observed the demolition of numerous residential buildings of its main structure (stem), creating openings in previously clustered areas, in an attempt to reduce density and ensure greater space mobility (Figure 4). Major demolitions are also occurring in buildings of Toulouse-Le Mirail University. This university, in terms of architecture, represents a sort of reinforced concrete version of the Free University of Berlin, forming a spatially structured building from the "web" system with precast building elements (Figure 5). The ongoing demolitions therefore simultaneously achieve two important design innovations developed by Candilis-Josic-Woods, the system "from stem to cluster" and the "web" system.

Faced with this, discussions and criticisms that arose at the Team 10 meeting in Royaumont in 1962 gained new meaning, revealing possible limitations on the architect's performance in large-scale projects. In this way, the importance of the subjects discussed at that meeting is highlighted. Especially the issue involving greater participation of users and the possibility of designing elastic systems with the sharing of responsibilities, involving other architects and other professionals in the projects elaboration.

Figure 5 – Toulouse-Le Mirail. Demolition of university buildings in 2016. Source: author's photograph.

Apparently, the demolitions at Toulouse-Le Mirail, as well as the recent demolition of Robin Hood Gardens housing complex in London (MAIRS, 2017), a project by Alison and Peter Smithson, reach the core of essential postulates developed by Team 10. Therefore, with the appropriate temporal detachment, it is inferred that the discussion in Royaumont would already reveal a semantic change contained in the expression "utopia of the present", relating it to the meaning of another verb tense, more suited to the future in the past tense.

Final considerations

The Toulouse-Le Mirail project was approached in this article from its interweaving with the European welfare state and Team 10 trajectory, emphasizing concepts involved in the project and the relationship with a relevant moment for the group's affirmation in the beginning of the 1960's. The Team 10 meeting at Royaumont in 1962, in which Le Mirail was presented by Georges Candilis, reveals doubly the guiding theme of large-scale projects that dominated the architectural and urban agenda of the period, as well as details of discussions, criticisms and uncertainties that arose in architects such as, among others, José Antonio Coderch and Fernando Távora.

The unfolding of the Team 10 meeting in Royaumont can also be interpreted by the reflex into the work of various characters present, reaffirming the importance of the event. The plea on user participation in project processes, for example, will relate to the architecture of Ralph Erskine and Giancarlo De Carlo in housing projects such as, respectively, Byker in Newcastle upon Tyne (1969-1981) and Mazzorbo in Venice (1985-1986). Guillermo Jullian de la Fuente, another present architect, will have a leading role as a collaborator in the last phase of Le Corbusier's office in Paris, especially in the 1964 Venice Hospital project. According to Kenneth Frampton (2001), the project in Venice has inspiration on structural grid with courtyards designed for the Free University of Berlin, in a kind of feedback that Le Corbusier absorbed from the work of his former collaborator Shadrach Woods. Another participant, Christopher Alexander (1988), will publish in 1965 the text "A city is not a tree", which Aldo van Eyck suggested, would have a link with his diagram that identified the relation between leaf and tree, and which was presented by Van Eyck in Royaumont (SMITHSON, 1974).

Despite the recent demolitions taking place in Le Mirail, reflecting social problems that can also be related to its spatial configuration, the importance of the Candilis-Josic-Woods office project cannot be ignored, as it includes new postulates and renews the agenda of the modern movement, especially with the end of the CIAM. By questioning Athens Charter, Team 10 architects sought greater interaction between the design of their buildings and local constraints, proposing new patterns of association, creating innovative urban structures, and reflecting on how architecture could act in mediation between the individual and the collective.

In this sense, as mentioned by Risselada & Heuvel (2006), the importance of Team 10 must be observed as long as the issues that motivated them remain relevant, even if current answers to these questions are different. It is therefore opportune to revisit Toulouse-Le Mirail project, as it is understood that the questions that originated it, as well as the positive and negative consequences of its built experience, can contribute with new reflections that are pertinent to the project of large scale settlements in its relationship with the contemporary city.

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